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01/04/2006

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EXAMINER

MAI, TIEN HUNG

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,302	Applicant(s) KOBAYASHI ET AL.	
	Examiner TIEN MAI	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/29/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response of 05/29/2008 has been entered in the record and considered. Upon entering amendment, claims 1-30 have been cancelled; claims 31-48 have been added.

Claim Objections

2. Claims 31-36, it is not understood what is meant by "a plurality of rod-like electrodes disposed along an edge portion of a rectangular substrate to be treated (emphasis added)." Since positioning of the electrodes relative to substrate is temporary, when the substrate is removed, the electrodes if maintained in relative location to the substrate would no longer belong to the electrostatic chuck; therefore, the electrodes should not be disposed with respect to the substrate. Furthermore, the phrase "a shorter side of each of said rod-like electrodes for electrostatically attracting the rectangular substrate runs in parallel to a longer side of said rectangular substrate (emphasis added)" is unclear because (1) it appears that the substrate is only attracted by the shorter side of the electrode and (2) the phrase "runs in parallel" is colloquial language. For purpose of examination, the claim limitations are interpreted as "an electrostatic chuck with surface for receiving a substrate, a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel the surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes".

3. Claim 32, the functional language “wherein wiring to said rod-like electrodes can be changed over to mono-pole or to bi-pole” cannot be achieved by the recited structure of the claim. According to MPEP 2114, apparatus claims must be structurally distinguishable from the prior art. In order to achieve the functional language, the structure must be recited in the claim; furthermore, the phrase “can be change over” is indefinite. For purpose of examination, the functional language is interpreted as “wherein said rod-like electrodes connected to mono-pole or to bi-pole”.

4. Claim 37, it is not understood what is meant by “an electrode providing a rectangular substrate stage for electrostatically attracting a rectangular substrate”. It is not understood how the electrode provides a rectangular substrate stage. Additionally, it is not understood what is meant by “a shorter side of each of said rod-like electrodes for electrically attracting said rectangular substrate runs in parallel to a longer side of said rectangular substrate”. (1) It appears that the substrate is only attracted by the shorter side of the electrode and (2) the phrase “runs in parallel” is colloquial language. Furthermore, it is not understood what is meant by “each of the rod-like electrodes includes high-purity ceramics that are thermally sprayed on a surface of rod-like base materials included in the rod-like electrodes to form thermally sprayed films”. For purpose of examination, the claim limitations are interpreted as “a rectangular substrate stage for electrostatically attracting a rectangular substrate, comprises a plurality of rod-like electrodes disposed on the rectangular substrate stage; each of the plurality of rod-like electrodes having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented

toward outside the rectangular substrate stage; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes, and wherein each of the rod-like electrodes includes high-purity ceramic that are thermally sprayed on a surface of rod-like base materials.”

5. Claims 43-48, it is not understood what is meant by “a plurality of rod-like electrodes disposed along an edge portion of a rectangular substrate to be treated”. Since positioning of the electrodes relative to substrate is temporary; when the substrate is removed, the electrodes if maintained in relative location to the substrate would no longer belong to the electrostatic chuck; therefore, the electrodes should not be disposed with respect to the substrate. Furthermore, the phrase “a shorter side of each of said rod-like electrodes for electrostatically attracting the rectangular substrate runs in parallel to a longer side of said rectangular substrate” is unclear because (1) it appears that the substrate is only attracted by the shorter side of the electrode and (2) the phrase “runs in parallel” is colloquial language. For purpose of examination, the claim limitations are interpreted as “a treating system provided with a rectangular substrate stage, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes”

6. Claim 44, the functional language “wherein wiring to said rod-like electrodes can be changed over to mono-pole or to bi-pole” cannot be achieved by the recited structure of the claim. According to MPEP 2114, apparatus claims must be structurally distinguishable from the prior art. In order to achieve the functional language, the structure must be recited in the claim; additionally, the phrase “can be change over” is indefinite. For purpose of examination, the functional language is interpreted as “wherein said rod-like electrodes connected to mono-pole or to bi-pole”.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 31, 32, 34, 35, 43, 44, 46, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Machida (US 4,848,536, “Machida”).

9. **In re claim 31**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: an electrostatic chuck with surface for receiving a substrate (see fig. 11), a plurality of rod-like electrodes (1-1 through 1-5) having shorter sides and longer sides and oriented along the electrostatic chuck in parallel the surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7).

10. **In re claim 32**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: an electrostatic chuck with surface for receiving a substrate (see fig. 11), a plurality of rod-like electrodes (1-1 through 1-5) having shorter sides and longer sides and oriented along the electrostatic chuck in parallel the surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes, wherein said rod-like electrodes connected to bi-pole (see fig. 7).

11. **In re claim 34**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: an electrostatic chuck with surface for receiving a substrate (see fig. 11), a plurality of rod-like electrodes (1-1 through 1-5) having shorter sides and longer sides and oriented along the electrostatic chuck in parallel the surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7), wherein said rod-like electrodes are comprised a rod-like base materials (51), wherein cross-sections of said rod-like materials are in stepped shapes (see figs. 13 and 15e), and wherein said rod-like electrodes are arranged with a predetermined gap between adjacent rod-like electrodes (see fig. 11).

12. **In re claim 35**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: an electrostatic chuck with surface for receiving a substrate (see fig. 11), a plurality of rod-like electrodes (1-1 through 1-5)

having shorter sides and longer sides and oriented along the electrostatic chuck in parallel the surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7), wherein said rod-like electrodes are comprised a rod-like base materials (51), and cross-sections of said rod-like materials are arranged like roofing tiles, each having a curved convex portion on one side and a curved concave portion on the other side, and wherein each of said convex portions is arranged with a predetermined gap (please note that figs. 15a-15e do not show a gap between the electrodes however in closed-up view, there is a gap between two electrodes as shown in fig. 7) between said convex portion and said concave portion of an adjacent rod-like electrode (see fig. 15d).

13. **In re claim 43**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8).

14. **In re claim 44**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8), wherein said rod-like electrodes connected to bi-pole (see fig. 7).

15. **In re claim 46**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8), wherein said rod-like electrodes are comprised of rod-like base materials (element 51 in fig. 13), where cross-sections of

said rod-like base materials are in stepped shapes (see figs. 13 and 15e), and wherein said rod-like electrodes are arranged with a predetermined gap between adjacent rod-like electrodes (see figs. 6 and 7).

16. **In re claim 47**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8), wherein said rod-like electrodes are comprised of rod-like base materials (element 51 in fig. 13), where cross-sections of said rod-like base materials are arranged like roofing tiles (see fig. 15d), each having a curved convex portion on one side and a curved concave portion on the other side, and wherein said convex portion is arranged with a predetermined gap (please note that figs. 15a-15e do not show a gap between the electrodes however in closed-up view, there is a gap between two electrodes as shown in fig. 7) between said convex portion and said concave portion of an adjacent rod-like electrode.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 33, 37-41, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machida in view of Motoaki (JP 62211363, "Motoaki").

19. **In re claim 33**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a plurality of rod-like electrodes (1-1 through 1-5) having shorter sides and longer sides and oriented along the electrostatic chuck (see figs. 6 and 7); a rectangular substrate (side-viewed of element 6 as shown in fig. 11) placed on the plurality of rod-like electrodes, wherein shorter sides of each of said rod-like electrodes are toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7), wherein the rod-like electrodes are comprised of rod-like base material (51) (see fig. 13). Machida does not explicitly disclose thermally sprayed films including high-purity ceramics are formed on said rod-like base material. Motoaki discloses thermally sprayed films (32) including high-purity ceramics (metallic powder of Ti) are formed on an electrode (11). Motoaki teaches that ceramic coating layer provides excellent adhesive powder and corrosion resistance for base material (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention

was made to spray a ceramic material onto a base surface to provide a corrosion resistant base surface to protect the base material (abstract).

20. **In re claim 37**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a plurality of rod-like electrodes disposed on a rectangular substrate stage (1-1 through 1-5 in fig. 7); each of the plurality of rod-like electrodes having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and the plurality of rod-like electrodes are made of rod-like base materials (51) (see fig. 13). Machida does not explicitly disclose each of the rod-like electrodes includes high-purity ceramic that are thermally sprayed on a surface of rod-like base materials. Motoaki discloses thermally sprayed films (32) including high-purity ceramics (metallic powder of Ti) are formed on an electrode (11). Motoaki teaches that ceramic coating layer provided excellent adhesive powder and corrosion resistance for base material (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to spray a ceramic material onto a base surface to provide a corrosion resistance base surface to protect the base material (abstract).

21. **In re claim 38**, Machida discloses cross-sections of said base materials are in rectangular shapes (see fig. 7).

22. **In re claim 39**, Machida discloses cross-sections of said base materials are in rectangular shapes with wider widths than lengths (elements 1-1 through 1-4 in fig. 6).

23. **In re claim 40**, Machida discloses cross-section of said base materials are in stepped shapes (see figs. 13 and 15e).

24. **In re claim 41**, Machida discloses cross-sections of said base materials are arranged like roofing tiles having a curved convex portion on one side and a curved concave portion on the other side (see fig. 15d).

25. **In re claim 45**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8), wherein said rod-like electrodes are comprised of rod-like base materials (element 51 in fig. 13). Machida does not explicitly disclose thermally sprayed films comprised of high-purity ceramics are formed on surfaces of said rod-like base materials. Motoaki discloses thermally sprayed films (32) including high-purity ceramics (metallic powder of Ti) are formed on an electrode (11). Motoaki teaches that ceramic coating layer provided excellent adhesive powder and corrosion resistance for base material (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to spray a ceramic material

onto a base surface to provide a corrosion resistant base surface to protect the base material (abstract).

26. Claims 36 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machida in view of Hiramatsu et al. (US 2003/0044653, "Hiramatsu").

27. **In re claim 36**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a plurality of rod-like electrodes (1-1 through 1-5) having shorter sides and longer sides and oriented along the electrostatic chuck (see figs. 6 and 7); a rectangular substrate (side-view as shown in fig. 6) placed on the plurality of rod-like electrodes, wherein shorter sides of each of said rod-like electrodes are toward outside the electrostatic chuck; and longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); wherein said rod-like electrodes are comprised a rod-like base materials (51). Machida does not explicitly the rod-like base materials include high-purity isotropic graphite. Hiramatsu teaches that an isotropic graphite material formed in a form disc to provide low thermal expansion ([0500]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to choose material having low thermal expansion, such as isotropic graphite to limit the expansion of the chuck so that the ceramic coating does not crack.

28. **In re claim 48**, Machida discloses apparatus for transporting an electrically conductive wafer, the apparatus comprising: a treating system (see fig. 17) provided with a rectangular substrate stage (see fig. 7), wherein said rectangular substrate stage

comprises a plurality of rod-like electrodes (elements 1-1 through 1-5 in fig. 7) having shorter sides and longer sides and oriented along the rectangular substrate stage, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; longer side of each of the rod-like electrodes is parallel to longer side of adjacent rod-like electrodes (see fig. 7); and a rectangular substrate (element 6 in fig. 11) is subjected to be electrostatically attracted by the plurality of rod-like electrodes (col. 3, line 67 - col. 4, line 8), wherein said rod-like electrodes are comprised of rod-like base materials (element 51 in fig. 13). Machida does not explicitly the rod-like base materials include high-purity isotropic graphite. Hiramatsu teaches that an isotropic graphite material formed in a form disc to provide low thermal expansion ([0500]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to choose material having low thermal expansion, such as isotropic graphite to limit the expansion of the chuck so that the ceramic coating does not crack.

29. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Machida in view of Motoaki, and further in view of Hiramatsu.

30. **In re claim 42**, Machida and Motoaki disclose the limitations as discussed above. Neither Machida nor Motoaki discloses the base materials are comprised of high-purity isotropic graphite. Hiramatsu discloses that an isotropic graphite material formed in a form disc to provide low thermal expansion ([0500]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to

choose material having low thermal expansion, such as isotropic graphite to limit the expansion of the chuck so that the ceramic coating does not crack.

Response to Arguments

31. Applicant's arguments filed 05/29/2008 have been fully considered but they are not persuasive for the reasons discussed below.

32. Applicant argues that “figs. 15a-15e of Machida shows a top view of the electrodes, rather than a cross-sectional view.....and that it cannot be determined what the actual cross-sectional structure of the electrodes is”. The examiner respectfully disagrees because according to Merriam-Webster's Collegiate Dictionary, a cross-section is defined as a cutting or a piece of something cut off at right angles to an axis. It is the examiner's position that Machida illustrates a cross-sectional view as shown in fig. 15d for a roofing tile; fig. 15e for a stepped shape; and fig. 13 illustrates the base material (51) having a stepped shape which allows air flowing through.

33. Applicant also argues that “the wiring to the electrodes can be changed over to mono-pole or bi-pole”. The examiner respectfully disagrees because the functional language cannot be achieved by the recited structure of the claim. According to MPEP 2114, apparatus claims must be structurally distinguishable from the prior art. In order to achieve the functional language, the structure must be recited in the claim; furthermore, the phrase “can be change over” is indefinite. According to specification page 18, lines 3-5 states that “the types of electrostatic chuck can be changed over to bi-pole type or mono-pole type in accordance with the way of wiring to the electrode” as

shown in applicant's figs. 6(a) and 6(b). While it appears that the chuck may be a mono-pole voltage type or a bi-pole voltage type, the wiring is not switching over to mono-pole or to bi-pole during operation.

34. For the reasons discussed above, the rejections are maintained.

Conclusion

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

36. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIEN MAI whose telephone number is (571)270-1277. The examiner can normally be reached on M-Th: 7:00-5:00.

Art Unit: 2836

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Michael J Sherry/

Supervisory Patent Examiner, Art Unit 2836

/Tien Mai/

Examiner, Art Unit 2836